

REMARKS

This responds to the Office Action dated October 19, 2005.

Claims 22, 48, 50, 51, 59, 67, 75, 79 and 80 are amended. Claim 49 is canceled. No claims are added. As a result, claims 22-48, 50-80 are now pending in this application.

Objection to the Specification

Applicant has amended the specification as suggested by the Examiner. Thus, Applicant respectfully requests withdrawal of this objection.

§112 Rejection of the Claims

Claim 79 was rejected under 35 U.S.C. § 112, first paragraph, for lack of enablement. Applicant respectfully traverses this rejection. Applicant respectfully submits that a method including “automatically varying the pacing energies during the threshold test based on a specified algorithm” as currently recited in claim 79 is fully supported in the specification. The specification describes a methodical application of voltage over fixed intervals. (*See, e.g.*, Application at page 9, lines 17-21). Therefore, Applicant respectfully requests withdrawal of this rejection.

Claim 80 was rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. Claim 80 has been amended to correct the improper antecedent basis. Therefore, Applicant respectfully requests withdrawal of this rejection.

§102/103 Rejections of the Claims

1. Claims 22, 24, 33, 34, 36-38, 41, 42, 48, 49, 52, 53, 55-57, 59, 65, 67, 75, 76 and 78 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Wang (EP 0310216A2). Applicant respectfully traverses.

Claims 22 and 24

Applicant cannot find in the cited portions of Wang any disclosure of “an alphanumeric output indicator of pacing energy ... wherein the indicator of pacing energy provides information about at least one of a voltage, a current, a pulsewidth, and an energy” as presently recited or incorporated in claims 22 and 24. Wang apparently does not describe an input-output device

capable of alphanumeric output of amplitudes (*see* Wang at page 12, lines 17-18). Nothing in the cited portions of Wang indicates that amplitudes are represented as alphanumeric output, instead of as a difficult-to-read signal trace deflection. Although current amplitudes are apparently provided to illustrate the method shown in the patent drawings of FIGS. 7B and 7C of Wang, Applicant can find nothing in Wang that indicates that its input-output interface 80 is capable of producing such alphanumeric outputs. Wang apparently describes one method of inducing pulses, a “Sequence method,” using FIGS. 7B and 7C to illustrate various possible implementations (*see* Wang at page 10, lines 41-53). There is apparently no connection between such figures, which are merely used purely for illustration of the method, and the input-output device 80 cited by the Office Action (*see* Office Action at page 5, lines 1-2). Specifically, there is no indication that the input-output device 80 is capable of producing any alphanumeric output annotations as displayed in the illustrative figures.

Moreover, Applicant cannot find in the cited portions of Wang any disclosure of “[a] cardiac rhythm management system comprising: an external user interface, the user interface including: a communication module, adapted for wireless communicative coupling to an implantable device” as presently recited in claim 22. Specifically, Wang apparently does not disclose an implantable device capable of wireless communication to an external user interface. In view of bandwidth and power restrictions of an implantable device, communicating information—including alphanumeric pacing energy annotations—from an implantable device to an external device presents a different challenge than mere wired communication of such information.

Thus, because Applicant cannot find all of the elements of claim 22 in Wang, Applicant respectfully requests withdrawal of this basis of rejection of claims 22 and 24. Furthermore, to the extent that this rejection constitutes a single-reference obviousness rejection under § 103, Applicant notes for the record that the Examiner appears to taking official notice of the missing elements, and pursuant to MPEP § 2144.03, Applicant reserves the right to request that a reference or affidavit be provided in support of such missing elements.

Claims 33 and 34

Applicant cannot find in the cited portions of Wang any disclosure or description of “a printer adapted to provide a printout including an electrogram, markers of paced and sensed

events, and a separate alphanumeric indicator of energy associated with each of the paced markers, wherein the indicator of pacing energy provides information about at least one of a voltage, a current, a pulsewidth, and an energy” as recited in claim 33. Similarly, with regard to claim 34, Applicant cannot find in the cited portions of Wang any disclosure of a user interface screen adapted to display this type of alphanumeric information. First, Applicant cannot find any mention of alphanumeric output in the limited disclosure in cited portions of Wang, which merely states “ME (NST) or VT waveforms [that] are fetched and displayed on the output device [along with] the thresholds MET, VTT and VFT.” (*See* Wang at page 13, lines 56-58). While a waveform may provide difficult-to-read graphical information regarding voltage, current, etc., it is not an alphanumeric display. Further, Wang apparently only refers to FIG. 8 to show further detail about the relationship between pacing pulses, inducing pulses, and the ECG signals (*see* Wang at page 10, lines 52-53; Wang at page 7, line 31). Applicant respectfully submits that Wang does not disclose a printer or a user interface capable of producing such output.

Thus, because Wang apparently does not disclose or describe every element in claims 33 and 34, Applicant respectfully requests withdrawal of this rejection of these claims. Furthermore, to the extent that this rejection constitutes a single-reference obviousness rejection under § 103, Applicant notes for the record that the Examiner appears to taking official notice of the missing elements, and pursuant to MPEP § 2144.03, Applicant reserves the right to request that a reference or affidavit be provided in support of such missing elements.

Claims 36-38, 41, 42, 48, 49, 52, 53, and 55-57

Applicant respectfully traverses. Applicant cannot find in the cited portions of Wang any disclosure or description of a method of “providing an alphanumeric indicator of pacing-level energy associated with each pulse” as recited or incorporated in claims 36-38, 41, and 42 and similarly recited in claims 48, 49, 52, 53, and 55-57. As discussed above, Wang apparently does not disclose any alphanumeric output from the input-output device. Thus, because the cited portions of Wang apparently do not disclose all elements recited or incorporated in claims 36-38, 41, 42, 48, 49, 52, 53, and 55-57, Applicant respectfully requests the withdrawal of the rejection of these claims under 35 U.S.C. § 102(b). For brevity, Applicant defers (but reserves the right to present) further remarks, such as concerning any dependent claims, which are believed separately patentable.

Furthermore, to the extent that this rejection constitutes a single-reference obviousness rejection under § 103, Applicant notes for the record that the Examiner appears to taking official notice of the missing elements, and pursuant to MPEP § 2144.03, Applicant reserves the right to request that a reference or affidavit be provided in support of such missing elements.

Claims 59, 65, and 67

Applicant cannot find in the cited portions of Wang any description of a system that includes “an external user interface, the user interface including a communication module, adapted for wireless communicative coupling to an implantable device” as recited or incorporated in claims 59 and 65 and similarly recited in claim 67. As discussed above, Wang apparently does not disclose an implantable device capable of wireless communication to an external user interface. Thus, because the cited portions of Wang apparently do not disclose all elements recited or incorporated in claims 59, 65, and 67, Applicant respectfully requests the withdrawal of the rejection. For brevity, Applicant defers (but reserves the right to present) further remarks, such as concerning any dependent claims, which are believed separately patentable.

Furthermore, to the extent that this rejection constitutes a single-reference obviousness rejection under § 103, Applicant notes for the record that the Examiner appears to taking official notice of the missing elements, and pursuant to MPEP § 2144.03, Applicant reserves the right to request that a reference or affidavit be provided in support of such missing elements.

Claims 75, 76, and 78

Applicant cannot find in the cited portions of Wang any description of a method of providing “a separate alphanumeric indicator of the energy associated with each of the paced markers” as recited or incorporated in claims 75, 76, and 78. As discussed above, Wang apparently does not disclose or describe providing any such alphanumeric output from the input-output device. Thus, because the cited portions of Wang apparently do not disclose all elements recited or incorporated in claims 75, 76, and 78, Applicant respectfully requests the withdrawal of the rejection of these claims. For brevity, Applicant defers (but reserves the right to present) further remarks, such as concerning any dependent claims, which are believed separately patentable.

Furthermore, to the extent that this rejection constitutes a single-reference obviousness rejection under § 103, Applicant notes for the record that the Examiner appears to taking official notice of the missing elements, and pursuant to MPEP § 2144.03, Applicant reserves the right to request that a reference or affidavit be provided in support of such missing elements.

2. Claims 22, 36, 45 and 55 were rejected under 35 U.S.C. § 102(e) as being anticipated by Hsu et al. (U.S. Patent No. 6,091,990). As an initial note, Applicant reserves the right to swear behind or otherwise remove this § 102(e) reference as provided under 37 C.F.R. § 1.131. Nonetheless, Applicant respectfully traverses.

Claims 22, 36, 45, and 55

Applicant cannot find in the cited portions of Hsu et al. any disclosure or description of “an alphanumeric output indicator of pacing energy associated with an instance of pacing therapy delivery by the implantable device” as currently recited in claim 22 and similarly recited in claims 36, 45, and 55. While FIG. 6 of Hsu apparently includes an indication of an instance 162 of antitachyarrhythmia pacing energy, it is merely denoted with the label “ATP” instead of with any alphanumeric indicator of ATP pacing energy. The only alphanumeric indicator of energy apparent in FIG. 6 of Hsu is associated with therapy instance 164, which Applicant submits appears to indicate a defibrillation shock level of energy (e.g., 14J – 16J). By contrast, Applicants claims clearly recite an alphanumeric output indicator of pacing energy, which one of ordinary skill in the art would understand a pacing energy to be many orders of magnitude below such values as illustrated in Hsu. Because the cited portions of Hsu apparently do not disclose all elements recited or incorporated in claims 22, 36, 45, and 55, Applicant respectfully requests withdrawal of this rejection of these claims.

Allowable Subject Matter

Applicant gratefully acknowledges the allowance of claims 35, 44 and 68-74.

Claims 23, 25-32, 39, 40, 43, 46, 47, 50, 51, 54, 58, 60-64, 66 and 77 were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant acknowledges the conditional allowance of these claims

and reserves the right to make such amendments. Nonetheless, Applicant believes such claims to be in allowable form in view of the above remarks.

Claims 79 and 80 were indicated to be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112 set forth in the Office Action. Applicant believes that these claims as amended are now in allowable form.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

VICKIE L. CONLEY ET AL.

By their Representatives,

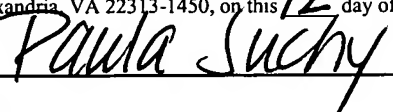
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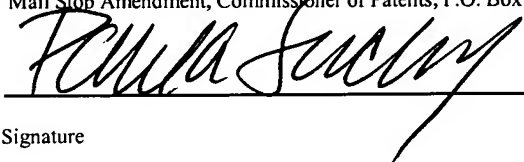
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